

RECEIVED  
CENTRAL FAX CENTER

MAR 06 2009

JAMES R. HAO  
ANTHONY C. MURABITO  
GLENN D. BARNES  
KEVIN A. BROWN  
THOMAS M. CATALE  
BRYAN M. FAILING  
JOSE S. GARCIA  
ERIC J. GASH  
STEVE S. KO  
REGINALD A. RATLIFF  
JOHN F. RYAN  
AMIR A. TABARROK

WILLIAM A. ZARBS\*  
NEAL A. OSBORN\*\*  
MICHAEL D. SOCHOR\*\*\*

\* PATENT AGENT  
\*\* PATENT ENGINEER  
\*\*\* ILLINOIS BAR

MURABITO  
HAO &  
BARNES LLP  
PATENT ATTORNEYS

TWO NORTH MARKET STREET  
THIRD FLOOR  
SAN JOSE, CALIFORNIA 95113  
TELEPHONE: (408) 938-9060  
FACSIMILE: (408) 938-9069  
[www.mhbpatents.com](http://www.mhbpatents.com)

**FAX COVER SHEET**SEND TO: Examiner Joshua TaylorCOMPANY NAME: USPTOFAX NUMBER: (571) 273-8300TRANSMISSION DATE: 3-6-2009FILE REF: 101806615FROM: AMIR TABARROKPAGE NUMBERS (including this sheet): 7

OPERATOR: \_\_\_\_\_

NOTES: Examiner Interview Agenda Scheduled  
for Monday, March 9, 2009.

Best regards,  
Amir Tabarrok

If there should be a problem with the quality of this transmission or you do not receive all of the pages, please call the operator named above at (408) 938-9060.

**CONFIDENTIALITY NOTICE**

This FACSIMILE transmission is intended only for the use of the individual or entity named above and may contain information that is confidential, attorney-client privileged and exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, reproduction, distribution or use of any of the information contained in this transmission is strictly PROHIBITED by law. If you have received this transmission in error, please immediately notify us by telephone and we will arrange the return of the original transmission to us at no expense to you. Thank you.

RECEIVED  
CENTRAL FAX CENTER

MAR 06 2009

Patent

SONY-50R4614.CIP

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ota et al.

Application No.: 10/806,615

Filed: 03/22/2004

For: METHODS AND SYSTEMS FOR  
RAPID CHANNEL CHANGE WITHIN A  
DIGITAL DISPLAY SYSTEM

Examiner: Taylor Joshua

Art Unit: 4157

Conf. No: 2638

EXAMINER INTERVIEW AGENDA

Please find attached an Examiner Interview Agenda for Monday March 9, 2009. Please note multiple proposed claim amendments for Claim 1 are provided below.

Listing of Claims:

1. (currently amended) A method for displaying digital content comprising:
  - using a first tuner to access a first transport stream associated with a first frequency;
  - displaying in a main picture area of a display screen, a program associated with said first transport stream;
  - using a second tuner during spare periods to access a second transport

SONY-50R4614.CIP  
US App. No.: 10/806,615

1

Art Unit: 4157  
Examiner: Joshua Taylor

stream associated with a second frequency;

decoding digital content from said second transport stream and caching said digital content into a memory buffer while said program associated with said first transport stream is being displayed in said main picture area of said display screen; and

upon said first tuner being switched to a new channel associated with said program information stored in said memory buffer, recalling said digital content from said memory buffer for use in providing a fast channel change operation to said new channel.

1. (currently amended) A method for displaying digital content comprising:

using a first tuner to access a first transport stream associated with a first frequency;

displaying in a main picture area of a display screen, a program associated with said first transport stream;

using a second tuner during spare periods to access a second transport stream associated with a second frequency;

decoding digital content from said second transport stream and caching said digital content into a memory buffer; and

upon said first tuner being switched to a new channel associated with said program information stored in said memory buffer, recalling said digital content

from said memory buffer for use in providing a fast and seamless channel change operation to said new channel.

1. (currently amended) A method for displaying digital content comprising:
  - using a first tuner to access a first transport stream associated with a first frequency;
  - displaying in a main picture area of a display screen, a program associated with said first transport stream;
  - using a second tuner during spare periods to access a second transport stream associated with a second frequency, wherein said second tuner is operable to scan a plurality of channels in a round robin fashion;
  - decoding digital content from said second transport stream and caching said digital content into a memory buffer; and
  - upon said first tuner being switched to a new channel associated with said program information stored in said memory buffer, recalling said digital content from said memory buffer for use in providing a fast and seamless channel change operation to said new channel.

#### REMARKS/ARGUMENTS

In response to Applicant's argument, the rejection asserts that Claim 1 does not recite explicitly the condition that only one memory component may be used. Proposed amendment of "recalling said digital content from said memory

buffer for use in providing a fast channel change operation to said new channel" further clarifies that the recalled digital content is from the same memory buffer used to cache the digital content.

In contrast, Reitmeier discloses using a frame buffer to store a single video frame (see Reitmeier, col. 5, lines 9-10). Reitmeier further discloses using a memory component to retrieve the I-frame associated with the desired new channel (see Reitmeier, col. 9 line 64 to col. 10 line 3). The frame buffer used to store a single video frame is different from the memory component used to retrieve the I-frame (see Reitmeier, Figure 1, elements 34 and 55). As such, Reitmeier fails to teach or suggest decoding digital content and caching the digital content into a memory buffer and upon the first tuner being switched to a new channel associated with the program information stored in the memory buffer, recalling the digital content from the memory buffer in the claimed fashion because the frame buffer and the memory component of Reitmeier are different.

Reitmeier fails to teach or suggest recalling the digital content for use in providing a fast and seamless channel change operation to the new channel, as claimed. For example, Reitmeier discloses that in the channel changing mode, format converter utilizes display frame buffer to store a single video frame while the tuner/demodulator pair associated with the main transport tunes/demodulates the new channel (see Reitmeier, col. 5, lines 7-12). The output signal represents

a freeze-frame image of the stored frame (see Reitmeier, col. 5, line 12). Thus, during the channel changing mode, a frozen-frame image is displayed, as disclosed by Reitmeier. As such, Reitmeier fails to teach or suggest recalling the digital content for use in providing a fast and seamless channel change operation to the new channel, as claimed.

Reitmeier fails to teach or suggest decoding digital content from the second transport stream and caching the digital content into a memory buffer while the program associated with the first transport stream is being displayed in the main picture area of the display screen, as claimed. The program, as claimed, comprises a plurality of frames. In contrast, Reitmeier discloses that during the channel changing mode, a frozen-frame image is displayed, as presented above. A frozen-frame image, as disclosed by Reitmeier, is partial display of the video stream, e.g., a frame image. As such, Reitmeier fails to teach or suggest decoding digital content from the second transport stream and caching the digital content into a memory buffer while the program associated with the first transport stream is being displayed in the main picture area of the display screen, as claimed.

Reitmeier fails to teach or suggest that the second tuner is operable to scan a plurality of channels in a round robin fashion, as claimed. For example, Reitmeier discloses that the auxiliary processing portion of the receiver

repeatedly tunes, demodulates and decodes some or all of a group of 4 channels identified in the scan list (see Reitmeler, col. 3, lines 21-23). Accordingly, Reitmeler fails to teach or suggest that the second tuner is operable to scan a plurality of channels in a round robin fashion, as claimed.

Claim 9 recites a third tuner, as claimed. Fries fails to teach or suggest a third tuner, as claimed. For example, Fries discloses a first tuner and an optional second tuner (see Fries, paragraph 77 and see Figure 3, element 300 and 302). The rejection asserts that Fries discloses that each tuner represent one or more tuners. Applicants respectfully disagree because Fries discloses that these two tuners are representative of one or more in-band tuners (see Fries, paragraph 77). As such, Fries fails to teach or suggest a third tuner to access a third transport stream associated with a third frequency, as claimed.

Respectfully submitted,  
MURABITO, HAO & BARNES LLP

Dated: \_\_\_\_\_, 2009

\_\_\_\_\_  
Amir A. Tabarrok  
Registration No. 57,137

MURABITO, HAO & BARNES LLP  
Two North Market Street  
Third Floor  
San Jose, California 95113

(408) 938-9060 Voice  
(408) 938-9069 Facsimile

SONY-50R4614.CIP  
US App. No.: 10/806,615

6

Art Unit: 4157  
Examiner: Joshua Taylor